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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,631

07/02/2003

Charles C. Hart

A-2202-AL

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08/09/2007

APPLIED MEDICAL RESOURCES CORPORATION

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EXAMINER

YABUT, DIANE D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

08/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/612,631

Applicant(s)

HART ET AL.

Examiner

Diane Yabut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This action is in response to applicant's amendment received 24 April 2007.

The examiner acknowledges the amendments made to the claims. However, they do not put the claims in condition for allowance.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26, 28-37, and 39-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hawkins** (U.S. Patent No. **6,899,053**).

Claims 26 and 28: Hawkins teaches a first interlocking member **12b** having a base with a width, a first half and a second half, the width being equal or smaller than the length, a protrusion **20** extending from a periphery or first half of the base, a standing portion **16** extending widthwise from the base adjacent to the protrusion ("projecting stud **16** can be placed on the second half **12b** [or on first interlocking member **12b**]", the protrusion being substantially smaller than the standing portion, a mating window **18** disposed through the base or the second half of the base adjacent to the standing portion and extending widthwise on the second half of the base, and a second interlocking member **12a** operably connecting with the first interlocking member, the second interlocking member having at least one protrusion **16** and at least one mating

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hole **22**, with the protrusion **20** operably connecting to the mating hole **22** and the standing portion **16** operably connecting to the mating window **18** (Figure 1, col. 5, lines 24-56).

Hawkins teaches the claimed device including a mating hole **22** being substantially smaller than a mating window **18**, except for the mating hole disposed through the base adjacent to the mating window on each of the first and second interlocking members, as well as having both the protrusion **20** and standing portion **16** being on both of the first and second interlocking members. Hawkins does teach that the standing portion **16** may be placed on the first interlocking member, and therefore be on the same side as a protrusion **20**. It would be obvious to modify Hawkins and also have both the standing portion **16** and the protrusion **20** on the second interlocking member **12a**, as well as both the mating window **18** and the mating hole **22** on each of the first and second interlocking members, since Hawkins also teaches that it can be appreciated by those skilled in the art that the standing portion **16** "can take on various shapes and configurations [or sizes], provided they will mate with an aperture of like configuration in a male/female connecting relationship." The idea of having each of the protrusion and standing portion on a first half, and a mating hole and mating window on a second half of both first and second interlocking members, with the protrusions operably connecting to the mating holes and the standing portions operably connecting to the mating windows, would have been obvious to one of ordinary skill in the art at the time of invention since it is a variation on male/female connectors that would provide secure engagement of the two connecting elements.

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Claim 29: Hawkins discloses the standing portion of the first interlocking member having a width and a length, the width being equal to or greater than the length and the length of the standing portion of the first interlocking member being less than the length of the base of the first interlocking member (Figure 1).

Claims 30 and 39: Hawkins discloses the protrusions of one of the first interlocking member and the second interlocking member being cylindrical and are sized and configured to match opposing mating holes.

Claims 31 and 40: Hawkins discloses the protrusions of one of the first interlocking member and the second interlocking member further comprising barbs or have increased end diameters to engage opposing mating holes of one of the first interlocking member and the second interlocking member in a fixed relationship when fully mated (Figures 1 and 8).

Claims 32 and 41: Hawkins discloses the standing portions of one of the first interlocking member and the second interlocking member and mating windows of one of the first interlocking member and the second interlocking member being sized and configured to engage and confine the suture ends (Figure 1).

Claims 33 and 42: Hawkins discloses the first and second interlocking members may be advanced, retracted, or adjusted along the length of the suture (Figure 1).

Claims 34 and 43: Hawkins discloses the standing portions of one of the first interlocking member and the second interlocking member further comprising locking or latching features, or the increased end diameters (Figure 1).

Claims 35 and 44: Hawkins discloses the mating windows of one of the first interlocking member and the second interlocking member further comprise receiving portions to mate with the locking features of the standing portions of one of the first interlocking member and the second interlocking member (Figure 1).

Claims 36-37 and 45-46: Hawkins discloses the barbs or increased end diameters or locking or latching features of the standing portions being in a non-contacting relationship with a suture (Figure 1).

3. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hawkins** (U.S. Patent No. **6,899,053**) in view of **Cecil** (U.S. Patent No. **6,729,529**).

Claim 27: Hawkins discloses the claimed device including the standing portion of the first interlocking member having a free end away from an end fixed to the base of the first interlocking member, except for the free end having two substantially straight portions extending substantially perpendicular to the base of the first interlocking member with a substantially curved portion connecting the two generally straight portions together.

Cecil teaches free end **122** having two substantially straight portions extending substantially perpendicular to the base of the first interlocking member with a substantially curved portion **130** connecting the two generally straight portions together (Figure 5). It would have been obvious to one of ordinary skill in the art at the time of invention to provide two substantially straight portions with a substantially curved portion connecting the two straight portions, as taught by Cecil, to Hawkins in order to

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effectively fit and clamp a circular or cylindrical device, such as a suture, into the first interlocking member (Figure 7).

4. Claims 38 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hawkins** (U.S. Patent No. **6,899,053**).

Claims 38 and 47: Hawkins discloses the claimed device including the standing portions of one of the first interlocking member and the second interlocking member being extendable through the mating window of one of the first interlocking member and the second interlocking member except for the standing portion being foldable onto an exterior surface of one of the first interlocking member and the second interlocking member away from the suture. This foldable feature is well known in the surgical art, as is with locking members or engaging members, such as clips or staples that are foldable onto the exterior surface of devices or tissues in order maintain secure engagement, and therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the standing portions of Hawkins with a foldable feature to securely lock onto an exterior surface.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane Yabut whose telephone number is (571) 272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DY

  
(JACKIE) TAN-UYEN HO  
SUPERVISORY PATENT EXAMINER

8/6/07